BCS-3D Series Dust Sensor

Overview

The BCS-3D Series Dust Sensors can be used to measure the concentration of PM2.5 or PM10 in indoor environments and support multiple control signal outputs.

Features

- Adopt laser dust sensor, with a detection particle size range of 0.3~10μm
- Multiple output methods optional to adapt to different scenario requirements
- Complete overvoltage and reverse connection protection, with high long-term reliability
- Optional relay output, enabling comprehensive independent control/alarm functions
- Six-color LED indicator can intuitively indicate the degree of environmental pollution
- Lightweight and elegant housing design, with standard 86-box installation hole spacing

Specifications

Sensor	Laser dust sensor
Range	PM2.5: 0~500μg/m³, Particle size: 0.3~2.5μm; PM10: 0~600μg/m³, Particle size: 0.3~10μm
Accuracy	PM2.5: ±10μg/m³ @0~100μg/m³, ±10%FS @100~500μg/m³ @25℃
Resolution	1μg/m³
Operating Environment	0℃~50℃, 5%~95%RH (no condensation)
Warm-up Time	≤2min
Responding Time	Single response time <1s in continuous measurement mode, comprehensive response time <10s
Output Signal	0V~10V & 4mA~20mA, Modbus RTU (RS485)
Power Supply	15~36VDC / 24VAC±20%
Storage Environment	-20℃~60℃, 5%~95%RH (no condensation)
Wiring	Terminal applicable wire gauge: 14-22AWG
Weight	NW: 142.3g, GW: 194.4g
Certifications	CE, RoHS
Protection Class	IP30
Material	PC housing

Ordering Information

Model No.	Range	Output Signal/Protocol
BCS-3DRU-100W	PM2.5: 0~500μg/m³, Particle size: 0.3~2.5μm;	Modbus RTU (RS485)
BCS-3DRU-200W	PM10: 0~600μg/m³, Particle size: 0.3~10μm	0V~10V&4mA~20mA
BCS-3DRM-300W	PM2.5: 0~500μg/m³, Particle size: 0.3~2.5 & PM10: 0~600μg/m³, Particle size: 0.3~10	Modbus RTU (RS485)

Appearance Dimensions